Fish, Wildlife and Rare Plant Accomplishments
Fiscal Year 2011

The Uinta-Wasatch-Cache National Forest (UWCNF) is found in northern Utah and southwest Wyoming. The Forest includes the Wasatch Front, the north slope of the Uinta Mountains, and the Stansbury and Vernon areas. This accomplishment report reviews some of the work completed on this Forest in the areas of fish, wildlife and rare plants from October 1, 2010 to September 30, 2011.

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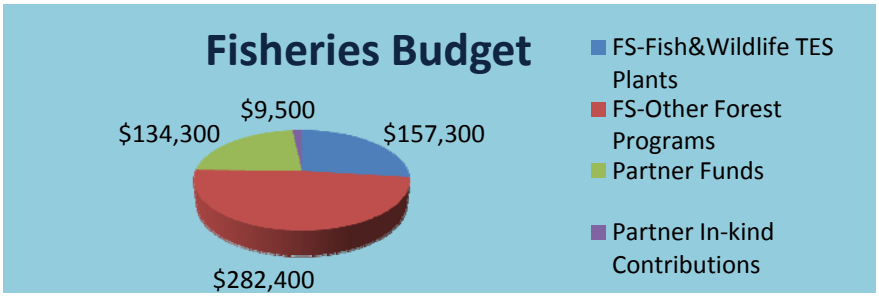
Program Partners

- *Utah Division of Wildlife Resources (UDWR)*
- *Trout Unlimited (TU)*
- *USDI Fish and Wildlife Service (Salt Lake City, USFWS)*
- *Wyoming Wildlife and National Resources Trust Fund*
- *Rocky Mountain Elk Foundation(RMEF)*
- *Central Utah Enterprises (Provo)*
- *Utah Partners for Conservation and Development (UPCD)*
- *Utah State University*
- *University of Utah*
- *Brigham Young University*
- *Boy Scouts of America*
- *PacifiCorp*
- *Sportsmen for Fish and Wildlife*
- *National Turkey Federation*
- *Salem City, Utah*
- *Albertsons*
- *Home Depot*
- *USFS Shrub Lab*
- *Red Butte Garden*

A special thanks to our many partners for their efforts in helping us conserve fish, wildlife and rare plants for the public on the UWCNF.

Fisheries and Amphibians

Our fisheries program includes a broad variety of projects and work. We are involved in a number of species conservation efforts through planning and implementing a wide variety of projects.



Provo River Stream bank Protection at Shingle Creek

With the high water this past spring, the Forest and Central Utah Enterprises Company, of Provo, were concerned about Provo River impacting the lower Provo Campground, an irrigation diversion and Shingle Creek. Working together we preserved the existing bank with a combination of log and rock structures. This prevented the stream from creating a new channel and significantly impacting an irrigation diversion. It also provided about a mile of additional fish habitat in the area.

Right Hand Fork Fish Restoration

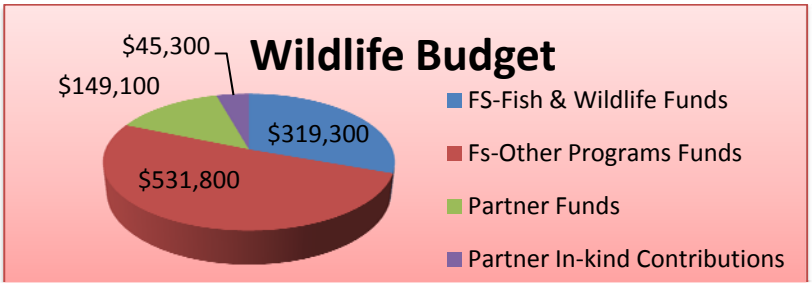
Right Hand Fork is a large tributary to the Logan River. Historically it contained Bonneville cutthroat trout. Over time non-native brown trout stocked in the Logan River moved into the drainage and eliminated the cutthroat trout. To restore native fish, a fish migration barrier was installed in 2010-11. Cutthroat trout were stocked by Utah Division of Wildlife Resources (UDWR) in a fishless section in the most upstream portion of the drainage. In 2012, a stream restoration project will begin, where rotenone will be applied to the stream to remove the brown trout. The barrier that was installed will prevent brown trout from reinvading the drainage thus protecting the native cutthroat trout. This is a joint project with the Utah Division of Wildlife Resources Habitat Council, Trout Unlimited - Cache Anglers and Utah State University

Fish Screens on the East Fork Bear River

Irrigation diversions are common throughout the west. There are two such diversions on the Forest on the East Fork of the Bear River. A few years ago these canals were surveyed to see how many fish were stranded in them after the gates were closed in the fall. We found a number of juvenile fish had been trapped in the canals and would ultimately die. We also found that the lower diversion would soon be inoperable in that the river was moving away from the diversion point.

Trout Unlimited, in working with Forest and the Fish and wildlife service, started looking for solutions. Over the past two years they have designed screen systems for the diversion and working with the canal companies. In 2012 one canal will be screened returning fish to the stream. The second diversion point will be moved about 4 miles downstream and screened. This will meet irrigators' needs and leave more water and fish in the headwaters of the Bear River. In 2013 the old canal is scheduled to be restored and the land reclaimed.

Wildlife



West Government Project (Vernon Area)

The juniper trees in the Vernon area have invaded into the sage brush plant community from the rocky slopes. Historically naturally occurring fire would have limited juniper trees from spreading into the sage brush. This change from a sage steppe community to thick continuous canopy of juniper trees can cause more intense and severe wildfires and less forage for wildlife. Wildlife species benefit from openings in the shrub/tree canopy and from a diversity of age and structural classes of shrubs/trees. This project used mechanical equipment to break up the juniper thickets. This will restore the sage brush steppe community and improve mule deer habitat. It will also reduce juniper density and fire threats.

We also closed user created roads and trails to improved wildlife habitat. We recognize Utah Partners for Conservation and Development and the Utah Division of Wildlife Resources for their substantial contributions to this project.

Bighorn Sheep Monitoring and Mapping

In January 2010, UDWR working with the Forest captured 12 bighorn sheep on the north slope of the Uinta Mountains. These animals were fitted with radio (6 animals) and satellite (6 animals) collars. Since then, we have been monitoring the movement of these animals to determine their home ranges and to identify the possible interaction with domestic sheep herds on the Forest. Disease transmission is a concern for the bighorn sheep through their historic ranges.

Lower Sage Aspen Restoration Prescribed Burn

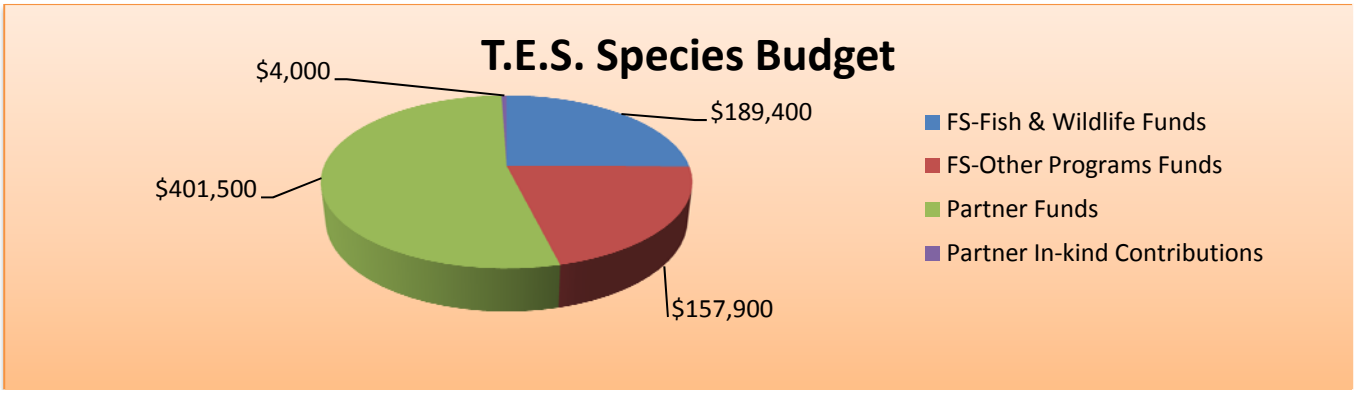
This project was a joint effort between Wyoming Wildlife and Natural Resources Trust Fund, the Rocky Mountain Elk Foundation and the Forest. Fire was used to reduce conifer species in the area while stimulating aspen regeneration

Young aspen are an important food source for many big game species. This also increased the amount of aspen originally in the burn area.

T.E.S. Species

(FEDERALLY LISTED THREATENED AND ENDANGERED AND REGIONAL FORESTER'S SENSITIVE SPECIES)

These include a number of native species of amphibians (boreal toad, Columbia spotted frog), fish (Bonneville and Colorado River cutthroat trout, northern and southern leatherside, etc.), mammals (bighorn sheep, wolverine, Canada lynx, etc.), birds (northern goshawk, bald eagle, greater sage grouse, etc.) and a wide variety of plants (Maguire primrose, Ute ladies' tresses, Deseret milkvetch, Clay phacelia, etc.).



Clay Phacelia Recovery Project

For the past few years the Forest has been surveying for Clay Phacelia, an endangered species, in Utah County. We looked in historic locations and suitable habitat sites that had not been surveyed. We have also been working with our research lab to grow additional seeds from greenhouse plants collected in the wild. In 2011, there was an increase production of seeds. Seeds were planted in test plots on Forest Service land in order to increase present populations. Another generation of greenhouse-grown seeds was produced. In 2012, we will continue to monitor the existing small plot and new reintroduction sites on Forest Service managed lands. We will also set-up three new larger plots for seedlings on Forest Service managed land.

South Strawberry Sagebrush Project

This project should help to maintain and restore greater sage-grouse nesting and brood-rearing habitat. UDWR treated the area by mowing the brush in a mosaic pattern to create a more diverse canopy cover. Funding for the project was from the Utah Partners for Conservation and Development through the Utah Division of Wildlife Resources

Diamond Fork Barrier Restoration

With the spring flooding of 2011, two fish migration barriers in the Diamond Fork Drainage were damaged. The Forest working with UDWR and Trout Unlimited of Utah to repaired these structures preventing the potential spread of non-native brown trout in the drainage. These barriers are located on Vat Creek and Diamond Fork.

Volunteer Climber installing monitoring plot on Primula maguirei population in Logan Canyon.

Maguires Primrose Monitoring

Maguires primrose (Primula maguirei) is a Threatened plant found only in Logan Canyon. The Forest has been working with an independent contract botanist and Utah State University botanists to develop a long-term monitoring program for this species. The monitoring program established a number of plots that have been read 3 times over 5 years. Our initial findings suggest that the Maguires primrose and recreational climbing are not mutually exclusive. We have also been conducting pollinator and genetic studies on this plant species. We've found that there are major differences between populations found in the lower and upper canyon areas. We may actually be dealing with two different species. When the species was listed in 1985, it was estimated that there were only about 300 plants found in nine populations. Recent surveys suggest that the number of plants and populations may have been drastically underestimated. In 2012, we hope to conduct wide scale surveys in potential habitat that was previously un-surveyed n 2012.

In 2008 fifty-three plant species were reviewed because of their limited distribution. Of these fifty-three reviewed, twenty-six were recommended to the Region to be placed on the Intermountain Region's Sensitive Species List. These species consisted of 1 to 30 known populations. These populations are being systematically resurveyed. Some of the plants are only found in herbarium (A plant storage area in forest files or at museums or universities). Other plants had not been surveyed since the 1920's. The Forest contracted botanists to revisit these original plant collection sites so the viability of the populations could be assessed. This also will allow us avoid impacts to species from projects proposed in these areas.

Maguires Primrose

A New Species Found Astragalus kelseyae

Beth Corbin, a BLM Botanist and the former Fire Ecologist on the UWCNF, discovered *Astragalus kelseyae* in the foothills of the Ogden Ranger District. This is a new species never before recorded. When a new species is discovered, a panel of botanists reviews the plant and the write-up to verifying that it is indeed a new species. Beth's write-up has gone through the review process and should be published this year. When the publication is finalized this species will be identified as one of the rarest plants on the forest. There is only one known population with only about one hundred individuals in a small localized area. Work is being done with Weber State Botany Department to have students assist in broad scale surveys to locate more populations.

Astragalus kelseyae

Photos of Dodecatheon habitat

One of the Rarest, *Dodecatheon utahensis*

Dodecatheon utahensis used to be one of the rarest plants on the forest with only four small populations found within a one square mile radius in Big Cottonwood Canyon. Nine new populations were discovered after additional survey work was completed. The distribution is now know to include Little Cottonwood Canyon. We also discovered that this small plant grows in a wider range of sites. It was previously thought to only grow in crags associated with seeps and waterfalls. Forest crews were helped in this effort by the Cottonwood Canyons Foundation and Utah Native Plant Society. Continued broad scale surveys are planned for 2012. Although the area and habitat have been expanded, it is still very rare.

Community Outreach and Education

Our Forest's biologists and botanists realized that the jobs we do are too big to complete without help from our partners both within and outside of the Forest Service. We therefore look for volunteers with a passion for fish, wildlife and rare plants. Our district volunteer coordinators help facilitate this work. We also hold a number of educational activities. One of these is our kokanee days held up at Strawberry Reservoir each fall. The Utah Division of Wildlife Resources staff led this effort as we work to inform the public about some of the fish found within the state.

Kokanee salmon

Smokey Bear at Kokanee Days

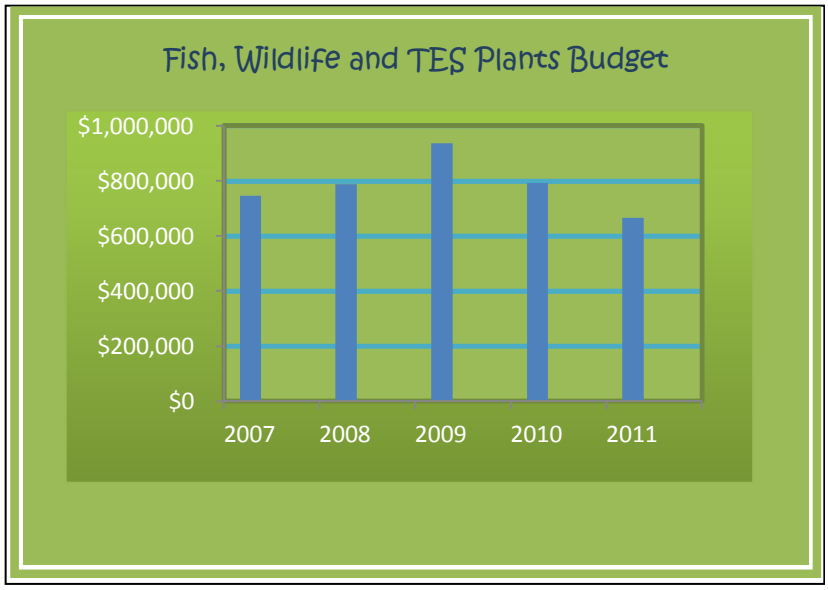
DWR employee with Kokanee salmon

General Overview

The Forest's budget in fish, wildlife and rare plant management has varied greatly over the past five years. The stream miles, lake acres and terrestrial habitat acres to improve have steadily increased over this same period.

This last year we improved over 15 miles of streams, 8 acres of lake and 6,500 acres of terrestrial wildlife habitat with our partners help.

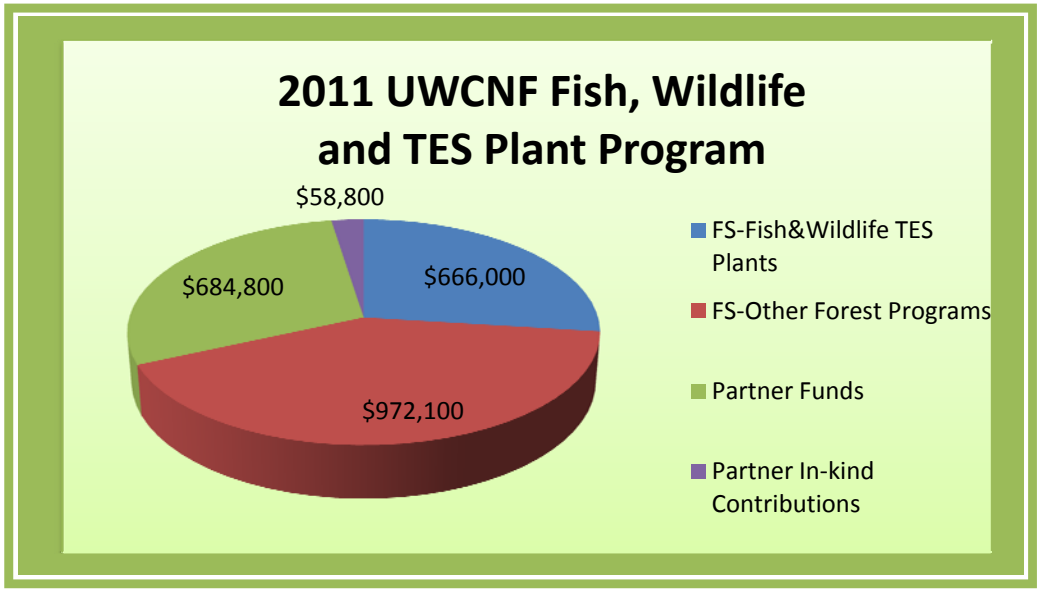
We've provide a variety of educational opportunities to well



over 3,000 youth. We hope to continue these efforts in the future. The fish, wildlife and TES plant program provided employment to eight seasonal employees. We had two full time summer volunteers helping with goshawk, snowshoe hare and beaver surveys. We also had a "Wounded Waunrrior" (war veteran) help in our Salt Lake office as she recuperated from her injuries.

Dan Garcia de la Cadena transferred from the Forest to the Prescott National Forest in Arizona. We will miss his expertise in wildlife. We hired Ashly Herrera as a student career employment program employee to take Dan's position in Evanston, Wyoming. Ashly is finishing her master's degree in wildlife management and will be joining the forest full time in June 2012.

We recognize and appreciate the major contribution that our partners make to the fish and wildlife program. Internally our fire, timber, recreation, range, soils and watershed and roads programs make major contributions. These contributions come in the form of prescribed burns, culvert replacements to allow for better fish passage, timber sales that improve wildlife browse for big game, livestock exclosures to improve habitat from amphibians, improved trails systems to protect wetlands and lake habitat, etc. We recognized the major contributions from state and other Federal agencies. We also recognize the many groups that focus on individual species or groups of species. We also appreciate the many individuals who help make our programs successful.



Bonneville Cutthroat Trout

Outlook for FY 2012

"Caring for the land and serving the people."

We look to 2012 with excitement for a new year. We have a number of projects that we'll continue to work on this coming year. The Supervisor's Office will be relocating in the spring to South Jordan just off 10600 South I15 exit on the west side. This will put the Forest headquarters under one roof.

Some of the projects we'll be working on this year include:

Fisheries

We're working closely with UDWR to stabilize Silver Lake in the headwater of American Fork Canyon. This should provide improved fishing opportunities and wetland habitat in the area. In the Right Hand Fork of the Logan we anticipate that we continue to improve cutthroat trout habitat through the removal of non-native brown trout. Cutthroat trout monitoring will also continue.

Wildlife

We have a number of wildlife habitat improvement projects that we will be continuing this year. These include some prescribed burns in the Hoop Lake and Hell's Hollow areas. We will be monitoring for American beaver, northern goshawk, three-toed woodpeckers, and snowshoe hare.

TES Species

We are going to be continuing our snowmobile survey work for Canada lynx and wolverine. Clay Phacelia plantings will continue. Monitoring of TES species will continue as project are proposed and implemented.

Community Outreach and Education

We hope to continue our community outreach in FY 2012. Already this year we have been out in the field with Jordan High's fish and wildlife classes. This is our fifth year of working with students in the field to help them understand fish and wildlife issues and career opportunities. The Diamond Youth Forest (http://www.fs.usda.gov/detailfull/uwcnf/learning/nature-science/?cid=stelprdb5108838&width=full) is also continuing to provide education opportunities to grade and middle school groups along the Wasatch Front. We anticipate a smaller seasonal workforce and we try to manage within our budget allocation.

Should you want to become more involved in our program even if only for a day, I would encourage you to contact Paul Cowley, fish and wildlife program manager. He can be contacted by phone at (801)236-3442 or by email at pcowley@fs.fed.us. We look forward to continuingwork with you to make our Forest a place where you want to be.

A special thanks to Chaille, a high school volunteer, who compiled this information and developed this report!